



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,626	05/26/2000	Ari Aho	442-009454-US(PAR)	7840

2512 7590 08/12/2003

PERMAN & GREEN  
425 POST ROAD  
FAIRFIELD, CT 06824

EXAMINER

AMINI, JAVID A

ART UNIT

PAPER NUMBER

2672

DATE MAILED: 08/12/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/579,626

Applicant(s)

AHO ET AL.

Examiner

Javid A Amini

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 7, 2003 has been entered.

***Response to Arguments***

- Applicant's arguments, see under remark, filed April 30, 2003, with respect to 35 USC 112 rejections of claims 2, and 8-9 have been fully considered and are persuasive. The rejections of claims 2, and 8-9 have been withdrawn.
- Examiner's note regarding applicant's comments on page 10 of remark "conserving power": There are screensavers for example ( a 3D flying objects MS windows) conserve power and prevent burn-in display element.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 and 9-16 rejected under 35 U.S.C. 103(a) as being unpatentable over Rader and further in view of Yamazaki.

1. As per claim 1,

Art Unit: 2672

Rader in (Col. 3, line 48-52) discloses that the full display mode can be automatically activated when the cover is opened and the partial display mode can be automatically entered when the cover is closed responsive to the inputs from the sensors. Rader in abstract discloses that partial display field, or area, is controlled to generate images in a first operating mode to conserve power. Rader in (Col. 3, line 44-45) discloses that the CPU responds to these sensors to control the display panel to display an image only in the partial display field. As applicant discloses on page 7 of remarks, that Rader does not explicitly (clearly) specify changing the position of first part of the display element at set intervals. However Yamazaki in abstract teaches this option very clearly. Examiner's note: "predetermined period" is equivalent of "set interval" or "threshold". Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Yamazaki into Rader to modify the display controller of Rader in Fig. 3 box 312 "CPU" with the "controller" of Yamazaki in Fig. 1 box 5. In order to have explicitly the two different modes of display.

2. Claim 2,

Rader discloses in (Col. 3, line 44-45) that the CPU responds to these sensors to control the display panel to display an image only in the partial display field.

Rader discloses in (Con. 8, line 21-23) that if 4 bit gray scale is employed the image capable of being rendered is reduced by a factor of four. This skill is very well known in the art.

3. Claim 3,

Rader discloses in (col. 8, line 30-32) the partial display field can be placed at any region of the full display screen area by selecting the rows and columns to be controlled by the pixel off signal.

Art Unit: 2672

4. Claim 4,

Rader discloses in (col. 8, line 30-32) that the partial display field can be placed at any region of the full display screen area by selecting the rows and columns to be controlled by the pixel off signal.

5. Claim 5,

Rader discloses in (col. 8, line 60-65) that Additionally, the output switch can be controlled so as to blank different rows and columns, thus changing the location of the partial display field. By changing the blanked columns and rows, the partial display field sourced from the second buffer can be placed in different areas of the display screen.

6. Claim 6,

Rader discloses the amount of rows and columns in the partial display field see rejection of claim

7. Claim 7,

Rader discloses the amount of rows and columns in the partial display field see rejection of claim.

8. Claim 9,

Rader discloses in (Col. 3, line 40-44) that the CPU in Fig. 3 also has an internal sensor (not shown) that detects inactivity. If the CPU receives no inputs from the user input and RF circuit for a predetermined period of time, the CPU can enter a sleep mode.

9. Claim 10,

Rader discloses in Fig. 1 and 2 a mobile station.

10. Claim 11,

Art Unit: 2672

Rader in (3, line 44-52) discloses that the CPU in Fig. 3 (segment # 312) responds to these sensors to control the display panel to display an image only in the partial display field when the phone enters a "sleep mode" due to inactivity of the processor, or when the phone is active while the cover 108 is closed. The full display mode can be automatically activated when the cover 108 is opened and the partial display mode can be automatically entered when the cover 108 is closed responsive to the inputs from the sensors. As applicant discloses on page 7 of remarks, that Rader does not explicitly (clearly) specify changing the position of first part of the display element at set intervals. However Yamazaki in abstract teaches this option very clearly.

Examiner's note: "predetermined period" is equivalent of "set interval" or "threshold". Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Yamazaki into Rader to modify the display controller with controller of Yamazaki in Fig. 1 box 5. In order to have explicitly the two different modes of display.

11. Claims 12,

As for "A device according to claim 1, wherein the changing means is arranged to change the information displayed on the first part of the display element", Rader in (Col. 3, line 44-45) discloses that the CPU responds to these sensors to control the display panel to display an image only in the partial display field (the first part of display).

12. Claim 13,

As for "An electronic device comprising: a display element to display information, wherein said display element has two modes, a full-screen mode to use the entire display element to display a first information and a partial screen mode to use a first part of the display element in which partial screen mode a second part of the display element is switched off; means for switching the

Art Unit: 2672

device into energy conservation mode by switching the display element to said partial screen mode; means for controlling the display element during energy conservation mode to display information on said first part; and changing means for changing the position of the first part of the display element on the display element at set intervals in order to avoid display burn-in".

Rader discloses in (Col. 3, line 48-52) that the full display mode can be automatically activated when the cover is opened and the partial display mode can be automatically entered when the cover is closed responsive to the inputs from the sensors. Rader discloses in abstract that partial display field, or area, is controlled to generate images in a first operating mode to conserve power. Rader discloses in (Col. 3, line 44-45) that the CPU responds to these sensors to control the display panel to display an image only in the partial display field. As applicant discloses on page 7 of remarks, that Rader does not explicitly (clearly) specify changing the position of first part of the display element at set intervals. However Yamazaki in abstract teaches this option very clearly. Examiner's note: "predetermined period" is equivalent of "set interval" or "threshold". Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Yamazaki into Rader to modify the display controller with controller of Yamazaki in Fig. 1 box 5. In order to have explicitly the two different modes of display.

13. Claim 14,

As for "A device according to claim 13, wherein the changing is arranged to change the position of said first part of the display element on the display element". Rader discloses in (Col. 3, line 44-45) that the CPU responds to these sensors to control the display panel to display an image only in the partial display field (the first part of display).

Art Unit: 2672

14. Claim 15,

As for “A method for decreasing the energy consumption of an electronic device, wherein a first part of the display element is used and a second part of the display element is switched off to conserve energy; information is presented on the first part of the display element; and the method further includes changing information displayed on the first part of the display element at set intervals in order to avoid display burn-in”, Rader discloses in (Col. 3, line 48-52) that the full display mode can be automatically activated when the cover is opened and the partial display mode can be automatically entered when the cover is closed responsive to the inputs from the sensors. Rader discloses in abstract that partial display field, or area, is controlled to generate images in a first operating mode to conserve power. Rader discloses in (Col. 3, line 44-45) that the CPU responds to these sensors to control the display panel to display an image only in the partial display field. As applicant discloses on page 7 of remarks, that Rader does not explicitly (clearly) specify changing the position of first part of the display element at set intervals.

However Yamazaki in abstract teaches this option very clearly. Examiner’s note: “predetermined period” is equivalent of “set interval” or “threshold”. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Yamazaki into Rader to modify the display controller with controller of Yamazaki in Fig. 1 box

5. In order to have explicitly the two different modes of display.

15. Claim 16,

As for “A method according to claim 15, further comprising changing the position of the first part of the display element on the display element”, Rader discloses in (Col. 3, line 44-45) that



the CPU responds to these sensors to control the display panel to display an image only in the partial display field (the first part of display).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8705 for regular communications and 703-746-8705 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid A Amini

Examiner

Art Unit 2672

Javid Amini

August 10, 2003



**MICHAEL RAZAVI**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**